AMENDMENTS TO THE SPECIFICATION

A. Please add new psaragraph 0011.1, which reads as follows:

[0011.1] FIG 5 illustrates a configuration in which the all around sidewall(s) 113 taper outward.

B. Please correct paragraph **0013** to reflect the following:

[0013] Referring to FIG. 1, a foundation pile according to the present invention is depicted in the form of a precast concrete pile 101. The concrete pile 101 may be made from materials, mixtures, and components generally known in the art. The concrete pile 101 has a top end wall 105, a bottom end wall 107, and an all-around sidewall(s) 113 extending therebetween. The top end wall 105 is designed to sustain a downwardly directed driving force (*e.g.*, applied by hydraulic ram) during installation of the pile 101 into the soil or earth. The bottom end wall 107 is provided sufficient bottom surface area to meet certain end load bearing requirements of the pile 101 (also the cross-sectional area of the body must be sufficient for buckling and torsional loads). In the embodiment of FIG. 1, the top end wall 105 and the bottom end wall 107 are generally identical, in that each has a flat surface of generally the same surface area. In further embodiments, the sidewalls 113 may not be generally straight and the bottom end wall 107 may provide a larger and/or irregular surface area. FIG 5 illustrates a configuration in which the sidewalls 113 taper outward and the bottom end wall 107 is larger than the top end wall 105.

C. Please correct paragraph **0016** to reflect the following:

[0016] In one unique aspect of the invention, the preferred concrete pile 101 is precast in a special-shaped mold. As illustrated by FIGS. 1-3, such a mold provides the inventive concrete pile 101 a pair of spiral ridges 109, each of which is directed or extends spirally downward about the sidewalls 113 of the concrete body 103. The spiral ridge 109 preferably extends entirely from the top end wall 105 downwardly to the bottom end wall 107. As best shown in FIG. 2, all spiral ridge "according to the invention" is defined, at least partially, by a notch or offset 109a from the sidewalls 113 that creates an offset surface [1036] 109b extending therefrom and which, as will be explained below, enhances the

support capacity of the foundation pile 101. The pile 101 is preferably oriented, during installation, such that both offset surfaces 109b faces generally downward (rather than generally upward) or in the direction of rotation (denoted by "AA" in FIGS. 1 and 3).

D. Please correct paragraph **0018** to reflect the following:

[0018] Because of the 45° angle of the spiral ridge 109, the round shaped pile 101 may be driven vertically downward into the unexcavated earth in a manner that produces a quarter turn (or 90° turn) with each distance equaling the height of the pile. In this way, a concrete pile 101 having a height of 12" and a diameter of 6" rotates about 1/4 turn or 90° or for every 11-12" penetration into the soil. Moreover, the spiral ridge 109 provides a facilitating function during installation of the pile 101. Specifically, as the pile 101 is impacted by a generally vertical downward force (*i.e.,* from a hammer or hydraulic ram) on the top end wall 105, the spiral ridge 109 causes the soil immediately in front of the offset surface [111] 109b, and adjacent the sidewall 113 and bottom end wall 107, to loosen. In this way, the resistance of the soil to downward movement of the pile 101 into the earth is reduced. It has been observed by the Applicant that a concrete pile 101, such as the embodiment depicted in FIGS. 1-3, may be driven or moved deeper into the earth than a traditionally shaped and sized pile (*i.e.,* without the spiral ridge [101] 109). Tests were conducted to measure the relative soil or ground penetration obtained by the inventive pile (as shown in FIGS. 1-3) and the traditional prior art pile when the same downward force is applied to both and in similar solid conditions. These tests showed that the inventive pile is driven a depth that is about 18% deeper than the depth to which the prior art pile is driven.

E. Please correct paragraph **0021** to reflect the following:

[0021] Now also referring to FIG. 4, the foundation pile 101 according to the invention is provided with structural features that enhance the supporting capacity of the pile (as well as facilitate its installation). In particular, the inventive foundation pile 101 is equipped with the structurally advantageous spiral ridge 109. The spiral ridge 109 provides an additional load bearing surface in the form of the offset surfaces 109b. The offset surfaces 109b supplement the bearing capacity of the end wall 107 to increase the overall load bearing capacity of the foundation pile 101 (which is also supplemented by the frictional surface

areas provided by the sidewalls). This is illustrated by the simplified force-body diagram of [FIG. 5] FIG. 4, wherein the resistant force or load bearing capacity of these surfaces is denoted by "BB", the frictional forces denoted by "CC", and the vertical load imparted on the pile 101 is denoted by LL. With respect to the foundation pile 101 of FIGS 1-3, a spiral ridge that is 12" long and 1/2" wide provides an additional load bearing surface of 6 square inches, or a total of 12 square inches for two spiral ridges. In contrast, if the foundation pile of FIGS. 1-3 did not have the spiral ridges (as in the prior art), its end load bearing surface would be provided by the end wall surface area or approximately 28 square inches (*e.g.*, πR^2, where R=3"). Thus, a foundation pile according to the invention provides 1.5 times more load bearing capacity than the end wall of a corresponding prior art foundation pile—as a result of the spiral ridge.